# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-721 REV. B

REF CANADIAN STC: SH93-1

FAA STC: SR00600NY

EASA STC: EASA.IM.R.S.01442

#### 1.0 PURPOSE:

THE PURPOSE OF THIS DART SERVICE INSTRUCTION (DSI), IS TO PROVIDE OPERATORS OF AS350 / 355 ROTORCRAFT EQUIPPED WITH DART D350-721-041/-043 HELI UTILITY BASKETS WITH AN UPGRADE KIT TO REPLACE THE EXISTING LID PROP ARM WITH A GAS SPRING.

### 2.0 PARTS LIST

ITEM No.	QTY -013	PART NUMBER	DESCRIPTION		
1	Х	D350-721-013	AUTOMATIC LID OPENER INSTL		
2	2	D3953-3	GAS SPRING STUD		
3	2	D3953-7	GAS SPRING SPACER		
4	2	D3953-9	GAS SPRING WASHER		
5	3	D3953-17	GAS SPRING SPACER		
6	1	D3953-19	GAS SPRING BRACKET		
7	1	D3953-21	GAS SPRING BRACKET		
8	1	D3969-5	GAS SPRING		
9	2	AN3C11A	BOLT		
10	2	AN3C15A	BOLT		
11	2	AN310C4	CASTELLATED NUT		
12	4	MS21043-3	NUT		
13	. 2	MS24665-300	COTTER PIN		
14	8	NAS1149C0332R	WASHER (OR AN960C10L)		
15	2	NAS1149C0432R	WASHER (OR AN960C416L)		

#### 3.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL LONGITUE		TUDINAL	
		Arm	Moment	Arm	Moment
D350-721-013 Automatic Lid Opener Instl	0.28 lb	± 44.1 in	± 12.35 lb-in	135 in	37.80 lb-in
!	0.01 kg	± 1.12 m	± 0.01 kg-m	3.43 m	0.03 kg-m

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

APPROVED

BY:
D. SHEPHERD (DE # 02)

DATE:
12.05.31
CERT. NO.:
SH93-1
ISSUE NO.:
6

Α	NEW IS	V ISSUE AJS			12.05.31
REV.			DESCRIPTION BY		
DESIGN DRAWN		AJS	DART AEROSPAC	LTD	
		AJS	HAWKESBURY, ONTARIO, O		
CHECK	ED	P	DRAWING NO.		REV. A
MFG. APPR.		N/A	DSI 9617	S	HEET 1 OF 4
APPRO	VED	14	TITLE		SCALE
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#### **4.0 INSTALLATION PROCEDURE**

NOTE: THIS KIT MAY BE INSTALLED AT EITHER END OF THE BASKET. HOWEVER, THE PROP ARM MUST BE REMOVED IN EITHER CASE AS IT WILL INTERFERE WITH THE FUNCTION OF THE GAS SPRING.

- 1) REMOVE THE D2332-041 PROP ARM.
- 2) GRIND FLUSH THE D3349-3 SPACER BUSHING ON THE BASKET'S BASE AS SHOWN IN FIGURE 1 (IT IS PERMISSIBLE TO ALSO GRIND THE LID SPACER FLUSH). TOUCH UP PAINT PER ICA-D350-721 REV. 2.
- 3) LOCATE THE D3953-21 GAS SPRING BRACKET ONTO THE BASKET BASE USING THE D3349-3 SPACER FOR THE OUTBOARD HOLE LOCATION, AS SHOWN IN FIGURE 1. TRIM STEEL MESH LOCALLY AS REQUIRED. TOUCH UP PAINT PER ICA-D350-721 REV. 2. TRANSFER MARK AND DRILL 1X Ø0.194 HOLES THRU THE BASKET'S SQUARE TUBE STRUCTURE AS SHOWN IN DETAIL A. INSTALL THE D3953-21 GAS SPRING BRACKET & D3953-17 GAS SPRING SPACER USING 2X AN3C11A BOLTS, 4X NAS1149C0332R WASHER & 2X MS21043-3 NUT AS SHOWN IN SECTION D-D.
- 4) LOCATE THE D3953-19 GAS SPRING BRACKET ONTO THE BASKET LID AS SHOWN IN FIGURE 1. TRANSFER MARK AND DRILL 2X Ø0.194 HOLES THRU THE BASKET'S SQUARE TUBE STRUCTURE AS SHOWN IN DETAIL B. INSTALL THE D3953-19 GAS SPRING BRACKET & (2) D3953-17 GAS SPRING SPACERS USING 2X AN3C15A BOLTS, 4X NAS1149C0332R WASHER & 2X MS21043-3 NUT AS SHOWN IN SECTION C-C.
- 5) REFER TO SECTION D-D FOR THE FOLLOWING: INSERT THE D3953-3 GAS SPRING STUD INTO THE D3953-21 GAS SPRING BRACKET & INSERT THE D3953-7 GAS SPRING SPACER ONTO THE D3953-3 GAS SPRING STUD. INSTALL THE LARGE END OF THE D3969-5 GAS SPRING ONTO THE D3953-5 GAS SPRING STUD AND FASTEN IN PLACE USING 1X D3953-9 GAS SPRING WASHER, 1X NAS1149C0432R WASHER, 1X AN310C4 CASTELLATED NUT & 1X MS24665-300 COTTER PIN. INSTALL COTTER PIN PER MS33540 OR AC43.13 CHAPTER 7-127.
- 6) REFER TO SECTION C-C FOR THE FOLLOWING: INSERT THE D3953-3 GAS SPRING STUD INTO THE D3953-19 GAS SPRING BRACKET & INSERT THE D3953-7 GAS SPRING SPACER ONTO THE D3953-3 GAS SPRING STUD. RAISE THE BASKET LID AND INSTALL THE ROD END OF THE D3969-5 GAS SPRING ONTO THE D3953-3 GAS SPRING STUD USING 1X D3953-9 GAS SPRING WASHER, 1X NAS1149C0432R WASHER, 1X AN310C4 CASTELATTED NUT & 1X MS24665-300 COTTER PIN AS SHOWN IN SECTION C-C. INSTALL COTTER PIN PER MS33540 OR AC43.13 CHAPTER 7-127.

NOTE: THE D3953-3 GAS SPRING STUD CAN BE HELD IN PLACE WITH A %6 OPEN END SPANNER / WRENCH.

WITH THE LID IN THE CLOSED POSITION THE GAS SPRING SHOULD NOT BE FULLY COMPRESSED.

7) TEST THE INSTALLATION. IF INSTALLED PROPERLY THE GAS SPRING SHOULD ASSIST THE BASKET USER IN BOTH OPENING AND CLOSING THE BASKET LID.

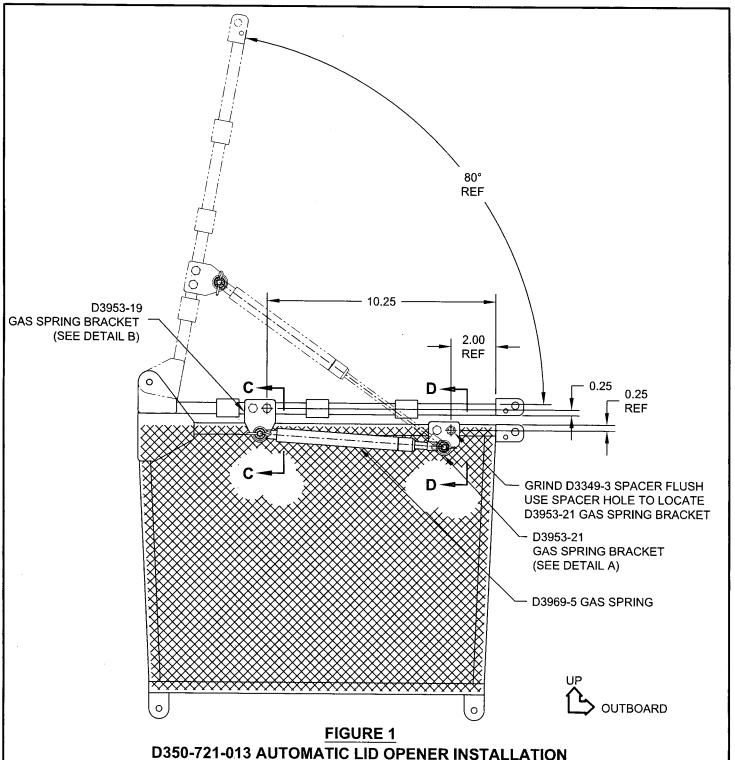
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# **D350-721-013 AUTOMATIC LID OPENER INSTALLATION**

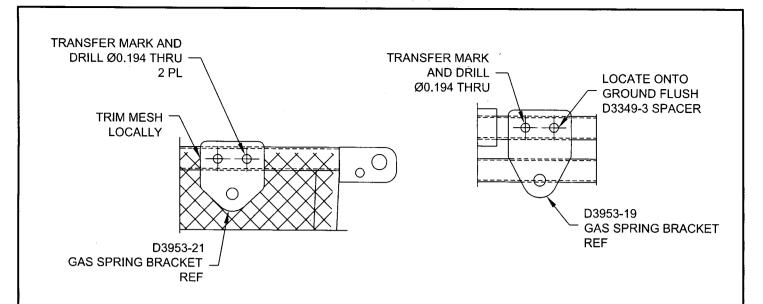
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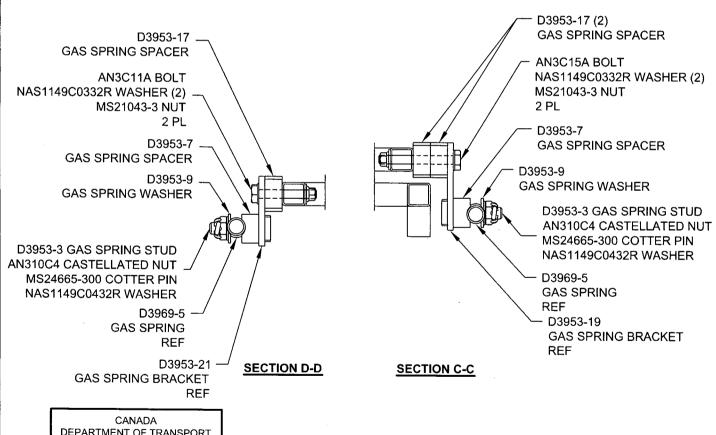
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## **DETAIL A**

# **DETAIL B**



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